# Rearview Camera

# HCE-C155

- OWNER'S MANUAL
  Please read before using this equipment.
- MODE D'EMPLOI
  Veuillez lire avant d'utiliser cet appareil.
- MANUAL DE OPERACIÓN
  Léalo antes de utilizar este equipo.

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# Operating Instructions

English

## ⚠ WARNING

**This symbol means important instructions. Failure to heed them can result in serious injury or death.**

**WHEN USING A CAMERA SYSTEM, THE DRIVER MUST VISUALLY CHECK ACTUAL CONDITIONS AROUND THE VEHICLE. MAKE SURE THERE ARE NO PERSONS OR ANIMALS IN THE AREA IN WHICH YOU ARE MANEUVERING OTHERWISE YOU COULD INJURE THEM.**

A camera assists the driver by sending images to the screen showing conditions in view of the camera. The camera uses a wide-angle lens, therefore, there is a difference in distance perspective between what is normally seen and what appears on the screen. Also, the images shown by the rearview camera are reversed, so as to appear the same as what is seen through the rearview mirror.

The camera may not perform to full capability due to variables such as:

- weather conditions such as hard rain, snow, fog or mud
- extremely high or low temperatures near camera
- slope of vehicle and/or roadway
- direct exposure to very bright light such as headlamp or bright sunlight
- moving from very dark to very bright light and vice versa such as in parking garages or tunnels
- extremely low light areas
- walls or objects that are located diagonally in relation to the camera
- retracted mirrors that change camera viewing angle
- open doors or trunks
- changes to height of vehicle due to loading capacity or hydraulic suspensions
- obstacles located at the corner of the vehicle

**DO NOT DISASSEMBLE OR ALTER.**

Doing so may result in an accident, fire or electric shock.

**KEEP SMALL OBJECTS SUCH AS BOLTS OR SCREWS OUT OF THE REACH OF CHILDREN.**

Swallowing them may result in serious injury. If swallowed, consult a physician immediately.

**USE THE CORRECT AMPERE RATING WHEN REPLACING FUSES.**

Failure to do so may result in fire or electric shock.

**USE ONLY IN CARS WITH A 12 VOLT NEGATIVE GROUND.**

(Check with your dealer if you are not sure.) Failure to do so may result in fire, etc.

**BEFORE WIRING, DISCONNECT THE CABLE FROM THE NEGATIVE BATTERY TERMINAL.**

Failure to do so may result in electric shock or injury due to electrical shorts.

**DO NOT USE BOLTS OR NUTS IN THE BRAKE OR STEERING SYSTEMS TO MAKE GROUND CONNECTIONS.**

Bolts or nuts used for the brake or steering systems (or any other safety-related system), or tanks should NEVER be used for installations or ground connections. Using such parts could disable control of the vehicle and cause fire etc.

**DO NOT DAMAGE PIPE OR WIRING WHEN DRILLING HOLES.**

When drilling holes in the chassis for installation, take precautions so as not to contact, damage or obstruct pipes, fuel lines, tanks or electrical wiring. Failure to take such precautions may result in fire.

**MINIMIZE DISPLAY VIEWING WHILE DRIVING.**

Viewing the display may distract the driver from looking ahead of the vehicle and cause an accident.

**DO NOT SPLICE INTO ELECTRICAL CABLES.**

Never cut away cable insulation to supply power to other equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.

**DO NOT INSTALL IN LOCATIONS WHICH MIGHT HINDER VEHICLE OPERATION, SUCH AS THE STEERING WHEEL OR GEARSHIFT.**

Doing so may obstruct forward vision or hamper movement etc. and results in serious accident.

**DO NOT ALLOW CABLES TO BECOME ENTANGLED IN SURROUNDING OBJECTS.**

Arrange wiring and cables in compliance with the manual to prevent obstructions when driving. Cables or wiring that obstruct or hang up on places such as the steering wheel, gear lever, brake pedals, etc. can be extremely hazardous.

**DO NOT ROUTE ELECTRICAL CABLES NEAR HOT OR MOVING PARTS**

Route the cables and wiring away from hot or moving parts, and fix them securely to avoid heat/mechanical damage to the cable insulation, which may result in shortcircuit, fire or electric shock.

**MAKE THE CORRECT CONNECTIONS.**
When making connections to the vehicle's electrical system, be aware of the factory installed components (e.g. on-board computer). Do not tap into these leads to provide power for this unit. When connecting the device to the fuse box, make sure the fuse for the intended circuit of the device has the appropriate amperage. Failure to do so may result in fire or damage to the unit and/or the vehicle. When in doubt, consult your Alpine dealer.

**USE THIS PRODUCT FOR MOBILE 12 VOLT APPLICATIONS.**
Use for other than its designed application may result in fire, electric shock or other injury.

**CHECK THAT THE CAMERA MOUNTINGS IS ATTACHED SECURELY, AND THAT THE SCREWS ARE TIGHT BEFORE DRIVING.**
Failure to do so may result in an accident.

**WHEN INSTALLING OR CHECKING A CAMERA, DO SO AFTER PARKING THE CAR IN A LEVEL, SAFE PLACE, TURNING OFF THE ENGINE, AND APPLYING THE HAND BRAKE.**
Failure to do so may result in an accident.

**WHEN USING A DRILL TO MAKE A HOLE, TAKE PRECAUTIONS SUCH AS WEARING GOGGLES SO FRAGMENTS DO NOT GET INTO THE EYES.**
Failure to do so may result in injury.

## ⚠ CAUTION

**This symbol means important instructions. Failure to heed them can result in injury or material property damage.**

**HAVE THE WIRING AND INSTALLATION DONE BY EXPERTS.**
The wiring and installation of this unit requires special technical skill and experience. To ensure safety, always contact the dealer where you purchased this product to have the work done.

**ARRANGE THE WIRING SO IT IS NOT CRIMPED OR PINCHED BY A SHARP METAL EDGE.**
Route the cables and wiring away from moving parts (like the seat rails) or sharp or pointed edges. This will prevent crimping and damage to the wiring.

**USE SPECIFIED ACCESSORY PARTS AND INSTALL THEM SECURELY.**
Be sure to use only the specified accessory parts. Use of other than designated parts may damage this unit internally or may not securely install the unit in place. This may cause parts to become loose resulting in hazards or product failure.

**CONNECT LEADS PROPERLY**
Be sure to connect the color coded leads according to the diagram. Incorrect connections may cause the unit to malfunction or cause damage to the vehicle's electrical system.

**HALT USE IMMEDIATELY IF A PROBLEM APPEARS.**
Failure to do so may cause personal injury or damage to the product. Return it to your authorized Alpine dealer or the nearest Alpine Service Center for repairing.

**EXCEPT FOR THE CAMERA, DO NOT ATTACH ANY PARTS TO AREAS WHICH WILL GET WET, OR WHERE THERE IS A LOT OF HUMIDITY OR DUST.**
Failure to do so may result in fire or damage.

**DO NOT ATTACH THE CAMERA MOUNTING TO FLUOROCARBON RESIN FINISHED CAR BODIES OR GLASS.**
Doing so could cause the strength of the camera mounting to weaken, which could cause it to fall of and cause accidents, injury, or damage to the car body.

**DO NOT ATTACH THE CAMERA MOUNTING TO ANY SURFACE WHERE THE ENTIRE ADHESIVE SURFACE CANNOT BE APPLIED.**
Doing so could cause the strength of the camera mounting to weaken, which could cause it to fall of and cause accidents, injury, or damage to the car body.

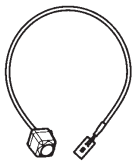
# NOTICE

- **About Care of Device**
  Do not assert any excess pressure to the camera or the mounting, as this could cause the camera direction to shift, or the camera mounting bracket to come off.
- To prevent the camera lens, mounting and cords from changing color or shape, or from deteriorating, wipe with a chemical-free, damp cloth.
- When washing the car, do not using an automatic car washer, or high-pressure washer. Doing so could cause the camera to come off, damage to the device cord, or may allow water to enter the camera or the inside of the car.
- In some cases, to attach the device, a hole must be drilled in the car body, requiring use of touch-up paint (retail product) for rust-prevention, and should be prepared beforehand.
- Be sure to disconnect the cable from the (–) battery post before installing your HCE-C155. This will reduce any chance of damage to the unit in case of a short-circuit.

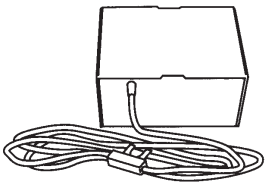
- Be sure to connect the color coded leads according to the diagram. Incorrect connections may cause the unit to malfunction or damage to the vehicle's electrical system.
- When making connections to the vehicle's electrical system, be aware of the factory installed components (e.g. on-board computer). Do not tap into these leads to provide power for this unit. When connecting the HCE-C155 to the fuse box, make sure the fuse for the intended circuit of the HCE-C155 has the appropriate amperage. Failure to do so may result in damage to the unit and/or the vehicle. When in doubt, consult your Alpine dealer.
- **About Rear Camera**
  The rear camera of this camera system is a dedicated product. Do not connect it to other cameras.
- **About Power Connection**
  Connect a reverse input cable (orange/white) to the power cable of the rear lamp. For details, consult a dealer purchased camera, or car dealer. Connect this to a power cable of the rear lamp, but not to the positive of the rear lamp signal cable.
- **Do not use mobile phones and wireless devices near the camera.**
- Doing so may result in noise on the screen or malfunction. It is recommended to use mobile phones or wireless devices away from the camera.
- **About Camera Installation Location**
  Before installing, make sure there is a enough space to be able to install the camera. If possible, install the camera in the center of the bumper or other fitting. If the camera is installed at a distance left or right of center, the image may differ from the real view.
- **Confirming the Display Function**
  To connect the unit, confirm that the monitor will require a compatible RCA pin jack.

# Installation/Installation/Instalación

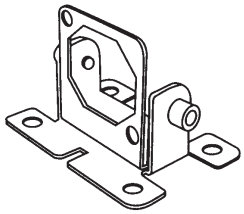
## Check Accessory Parts/Vérifiez les accessoires/Compruebe los accesorios



① Rearview camera (0.5m)
① Caméra de recul (0,5m)
① Cámara de marcha atrás (0,5m)



② Power unit (Reverse/ ACC/GND: 1m)
② Alimentation (Reverse/ACC/GND : 1m)
② Unidad de alimentación (Marcha atrás/ACC/ TIERRA: 1m)



③ Camera mounting bracket
③ Support de fixation
③ Soporte de la cámara

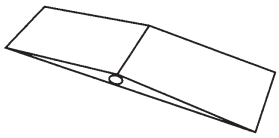
x 2

④ Hex screw
④ Vis hexagonale
④ Tornillo hexagonal

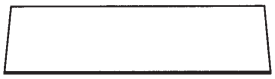
⑤ Hexagonal wrench
⑤ Clé 6 pans
⑤ Llave hexagonal

⑥ RCA extension cable (5m)
⑥ Rallonge RCA (5m)
⑥ Cable de extensión RCA (5 m)

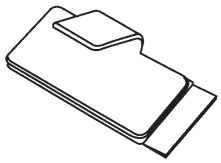
⑦ ACC connection cable (6m)
⑦ Câble Accessorie (6m)
⑦ Cable de conexión ACC (6m)



⑧ Waterproofing pad
⑧ Protège câble étanche
⑧ Dispositivo protector resistente al agua

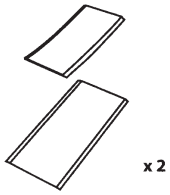


⑨ Waterproofing pad adhesive sheet
⑨ Adhésif pour protège câble étanche
⑨ Hoja adhesiva para el dispositivo protector resistente al agua



x 5

⑩ Wire clamp
⑩ Attache fils
⑩ Fijador de cables



x 2

⑪ Velcro fastener
⑪ Bande velcro
⑪ Fijador de velcro

x 4

⑫ Self-tapping screw
⑫ Vis autotaraudeuse
⑫ Tornillo macho roscador

⑬ Camera extension cable (5m)
⑬ Rallonge câble caméra (5m)
⑬ Cable de extensión de la cámara (5m)

# Installation Location/Emplacement de l'installation/Ubicación de la instalación

**Install the Camera on the Rear Bumper/Installez la caméra sur la carrosserie arrière/Instalación en el acabado trasero**

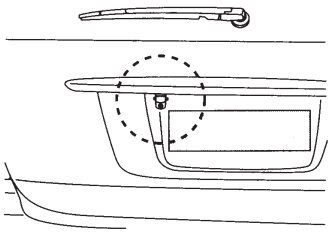


Fig.1/Schéma 1/Fig.1

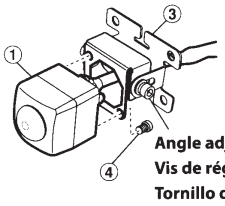



Fig.2/Schéma 2/Fig.2

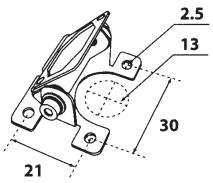



Fig.3/Schéma 3/Fig.3

## English

1 Attach the camera ① to the camera mounting bracket ③ using the hex screws ④ (see Fig.2).
2 Loosen the camera mounting bracket ③ and angle adjustment screw. Determine the attachment angle, and carefully tighten the angle adjustment screw.
3 Make a 13 mm hole in the rear bumper camera mounting bracket (see Fig. 3).
4 Pull the camera cable inside the car through the hole made in step 3.
5 Peel off the adhesive seal from the camera mounting bracket and attach the camera mounting bracket on the chassis of the vehicle. If required, fix the camera mounting bracket using self-tapping screws.

- *Attach the camera in a position where it does not touch the number plate.*
- *Use retail touch-up paint to paint the surface and surrounding area when a hole has been made in a metal surface.*
- *Waterproof securely the hole made for the camera cable using a commercially-available waterproof tape or sealing material.*
- *If necessary, use a self-tapping screw ⑫ to fix the camera mounting bracket (In the case of a plastic mount area).*
- *You can also install the camera by using the sub bracket supplied with KTX-C10LP (License Plate Mounting Kit for Rearview Camera) (sold separately).*

## Français

1 Fixez la caméra ① au support de fixation ③ à l'aide des vis hexagonales ④ (schéma 2).
2 Déserrez le support de fixation ③ et insérez en angle la vis de réglage. Choisissez l'angle de fixation, puis reserrez délicatement la vis dans cet angle.
3 Faites un trou de 13 mm dans la carrosserie arrière pour fixer le support de fixation (schéma 3).
4 Faites passer le câble de la caméra à l'intérieur du véhicule par le trou fait à l'étape 3.
5 Retirez le film protecteur du support de fixation, puis fixez ce dernier sur le châssis du véhicule. Le cas échéant, fixez le support à l'aide des vis autotaraudeuses.

- *Fixez la caméra de façon à ce qu'elle ne touche pas la plaque d'immatriculation.*
- *Si vous avez percé un trou dans une surface métallique, une retouche est nécessaire sur et autour de la surface avec une peinture spéciale.*
- *Les passes-fils à l'intérieur du véhicule doivent être imperméables ; pour cela, utilisez du ruban adhésif imperméable ou un autre produit d'étanchéité vendu dans le commerce.*
- *Si besoin est, utilisez une vis autotaraudeuse ⑫ pour fixer le support de fixation (notamment si la surface de montage est en plastique).*
- *Vous pouvez installer la caméra à l'aide du sous-support fourni avec le KTX-C10LP (License Plate Mounting Kit for Rearview Camera) (vendu séparément).*

## Español

1 Fije la cámara ① al soporte de la cámara ③ con los tornillos hexagonales ④ (véase la figura 2).
2 Afloje el soporte de la cámara ③ e inserte en ángulo el tornillo de ajuste. Calcule el ángulo de fijación y, con cuidado, apriete el tornillo en dicho ángulo.
3 Realice un agujero de 13 mm en el soporte de la cámara del acabado trasero (véase la figura 3).
4 Tire del cable de la cámara desde el interior del coche a través el agujero del paso 3.
5 Retire el sello adhesivo del soporte de la cámara y fíjelo en el chasis del vehículo. Si fuera necesario, fije el soporte de la cámara con ayuda de los tornillos embriados suministrados.

- *Coloque la cámara en una posición en la que no toque la matrícula.*
- *Utilice pintura para retocar la superficie y el área que rodea el agujero realizado en la superficie de metal.*
- *Para garantizar que las arandelas aislantes colocadas en el interior del vehículo son resistentes al agua, utilice cinta adhesiva resistente al agua o algún tipo de material sellante.*
- *Si es necesario, utilice un tornillo macho roscador ⑫ para fijar el soporte de la cámara (en caso de que el área de instalación sea de plástico).*
- *También puede instalar la cámara utilizando el soporte auxiliar suministrado KTX-C10LP (License Plate Mounting Kit for Rearview Camera) (se vende por separado).*

## Installing the Power Unit/Installation du bloc d'alimentation/Instalación de la unidad de alimentación

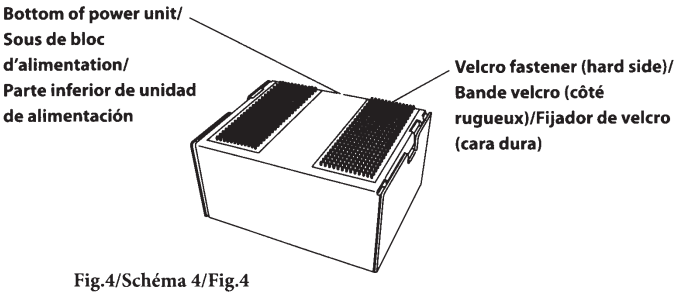



Fig.4/Schéma 4/Fig.4

### English

1 Attach the Velcro fastener (hard side) ⑪ to the bottom of the power unit ② (see Fig. 6).
2 Attach the Velcro fastener (soft side) ⑪ to the floor, and secure the power unit ②.

- *When attaching the Velcro fastener (hard side) ⑪ to the floor carpet, do so without the Velcro fastener (soft side) ⑪ attached.*

### Français

1 Fixez la bande velcro (côté rugueux) ⑪ sous le bloc d'alimentation ② (schéma 6).
2 Fixez la bande velcro (côté doux) ⑪ au sol, puis attachez le bloc d'alimentation ②.

- *Lorsque vous fixez la bande velcro (côté rugueux) ⑪ au sol, fixez-la sans décoller le côté doux de la bande velcro ⑪.*

### Español

1 Coloque el fijador de velcro (cara dura) ⑪ en la parte inferior de la unidad de alimentación ② (véase la figura 6).
2 Coloque el fijador de velcro (cara blanda) ⑪ en el suelo y fije la unidad de alimentación ②.

- *Al colocar el fijador de velcro (cara dura) ⑪ en la moqueta del suelo, hágalo sin despegar la cara blanda del velcro ⑪.*

## Connections/Raccordements/Conexiones

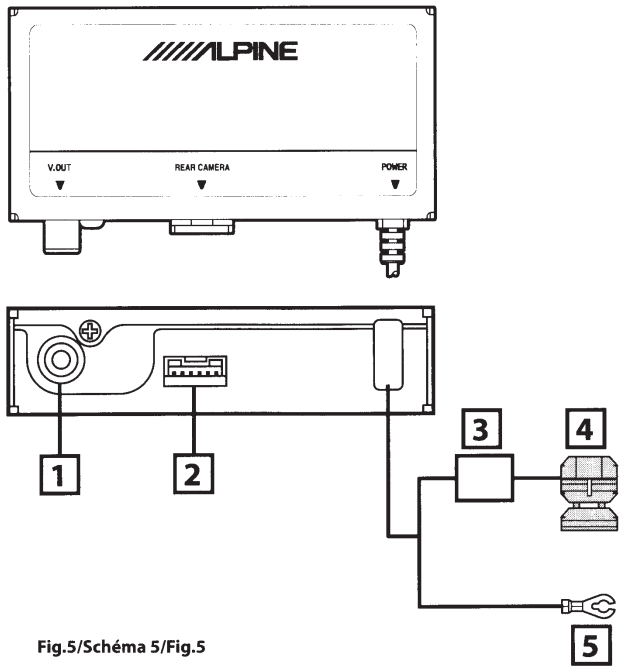



Fig.5/Schéma 5/Fig.5

### English

| No. | Name | Lead color | Specification/ Function | Connect to |
|---|---|---|---|---|
| 1 | Video Output Connector | — | Outputs a camera video on the connected monitor or navigation system. | Connect the RCA extension cable (included), and then to the camera video input connector of the connected device. |
| 2 | Rear Camera Connector | — | Inputs the rear camera video signal. | Connect the camera extension cable to the rear camera. |
| 3 | Fuse | — | 7.5A | — |
| 4 | Reverse/ACC Lead | Orange/ white | When reversing the vehicle, the lead is used to supply power to the unit. | Connect the lead to the positive side of the rear lamp feed of the vehicle, or the ACC position. |
| 5 | Ground Lead | Black | Fix the lead securely to a metal part of the car's chassis. | Connect the lead securely to a metal part of the car's chassis. Failure to do so may cause a malfunction. |

- *Install the camera cable and RCA extension cable wiring away from the radio antenna and antenna cable. If they are too close, or wrapped together, noise can result.*

## Français

| N° | Nom | Couleur du connecter | Caractéristique/ fonction | Le raccorder à |
|---|---|---|---|---|
| 1 | Connecteur de sortie vidéo | — | Reproduit l'image de la caméra sur le moniteur connecté ou le système de navigation. | Raggordez-le au câble rallonge RCA (fourni), puis au connecteur d'entrée vidéo de la caméra du périphérique connecté. |
| 2 | Connecteur de la caméra arrière | — | Diffuse le signal vidéo de la caméra arrière. | Connectez le câble rallonge de la caméra à la caméra arrière. |
| 3 | Fusible | — | 7,5A | — |
| 4 | Fil Reverse/ ACC | Orange/ blanc | Lorsque vous faites marche arrière, ce fil est utilisé pour alimenter l'unité. | Connectez ce fil à la borne positive de l'alimentation du feu arrière du véhicule, ou placez la clé de contact en position ACC. |
| 5 | Conducteur de terre | Noir | Fixez ce connecteur correctement à un élé ment métallique du châssis du véhicule. | Raccordez ce connecteur correctement à un élément métallique du châssis du véhicule. Dans le cas contraire, un dysfonctiopnnement peut se produire. |

- *Installez le câble de la caméra et le câble rallonge RCA à l'écart de l'antenne radio et du câble d'antenne. S'ils sont trop prêts les uns des autres, des interférences peuvent se produire.*

## Español

| N.° | Nombre | Color del cable | Especificación/ Función | Conectar a |
|---|---|---|---|---|
| 1 | Conector de salida de vídeo | — | Emite la imagen de la cámera en el monitor o en el sistema de navegación conectado. | Conecte el cable de extensión RCA (incluido) y, a continuación, el conector de entrada de la cámera del dispositivo conectado. |
| 2 | Conector de cámera trasera | — | recibe la señal de vídeo de la cámara trasera. | Conecte el cable de extensión de la cámera a la cámera trasera. |
| 3 | Fusible | — | 7,5A | — |
| 4 | Cable Marcha atrás/ACC | Naranja/ Blanco | Cuando el vehículo circula marcha atrás, este cable se utiliza para alimentar la unidad. | Conecte el cable al borne positivo de la alimentación de faros traseros del vehículo, o bien a la posición ACC. |
| 5 | Cable de tierra | Negro | Fije el cable correctamente a una pieza metálica del chasis del vehículo. | Conecte el cable correctamente a una pieza metálica del chasis del vehículo. Si no lo hace, la unidad podría no funccionar correctamente. |

- *Instale el cable de la cámara y el cable de extensión RCA desde la antena de radio y el cable de la antena. Si están demasiado cerca o entrelazados, podían producirse interferencias.*

## Adjusting the Camera Angle/Réglage de l'angle de la caméra/Ajuste del ángulo de la cámara

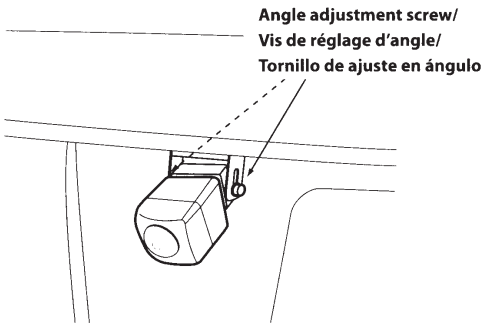



Fig.6/Schéma 6/Fig.6

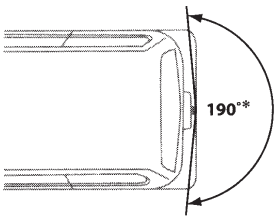



Fig.7/Schéma 7/Fig.7

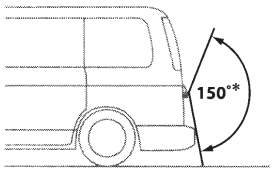



Fig.8/Schéma 8/Fig.8

## English

**⚠ Caution**
**When adjusting the camera angle, do so after turning off the engine and applying the hand brake to avoid an accident.**

1 Put the gear shift into reverse (R), and check the image from the camera on the display.
2 Loosen the camera mounting bracket ③ and angle adjustment screw. Determine the camera angle, and carefully tighten the angle adjustment screw.

* *The camera angles indicated in the figures are based on the specification of the camera (Fig.7 and 8). The actual camera angle will be narrower after graphic processing.*

## Français

**⚠ Attention**
**Veillez à couper le moteur et à mettre le frein à main avant de régler l'angle de la caméra afin d'éviter tout accident.**

1 Mettez le levier de vitesse en marche arrière (R), puis vérifiez l'image de la caméra affichée à l'écran.
2 Déserrez le support de fixation ③ et insérez en angle la vis de réglage. Choisissez l'angle de la caméra, puis reserrez délicatement la vis dans l'angle.

* *Les angles de la caméra indiqués dans les schémas sont basés sur les spécifications de la caméra (schémas 7 et 8). L'angle réel de la caméra sera plus précis après le traitement graphique.*

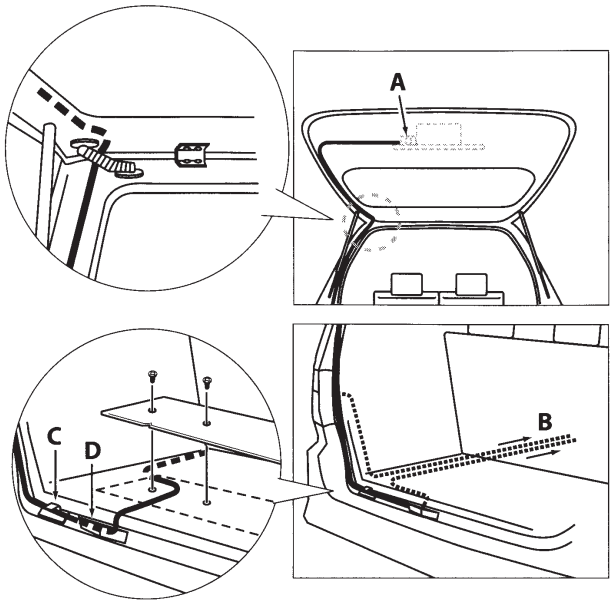
## Español

**⚠ Precaución**
**Cuando ajuste el ángulo de la cámara, apague primero el motor y ponga el freno de mano para evitar posibles accidentes.**

1 Ponga la palanca de marchas en marcha atrás (R) y compruebe la imagen de la cámara que se muestra en la pantalla.
2 Afloje el soporte de la cámara ③ e inserte en ángulo el tornillo de ajuste. Calcule el ángulo de la cámara y, con cuidado, apriete el tornillo en dicho ángulo.

* *Los ángulos de la cámara indicados en las figuras están basados en las especificaciones de la cámara (Fig. 7 y 8). El ángulo real de la cámara será más corto después del procesamiento gráfico.*

## Securing the Camera Cable/Fixation du câble de la caméra/Fijación del cable de la cámara




(A) Rearview camera/Caméra arrière/Cámara trasera
(B) To Power unit/Bloc d'alimentation/Unidad de alimentación
(C) Clamper/Attache-fils/Fijador
(D) Waterproofing pad/Protège-câbles imperméable/Dispositivo protector resistente al agua

Fig. 9/Schéma 9/Fig. 9

## English

1 Secure the camera cable while referring to Fig. 9.
Attach the waterproof pad ⑧ with the waterproof pad adhesive sheet ⑨, and secure any slack cable around the waterproof pad ⑧ using the wire clamp ⑩.

- *Ensure the cable does not get caught in the trunk, rear door(s) or any hinges.*
- *The cable should go on the outside of car hinges and harness covers.*
- *After completing wiring, open and close the trunk and the rear doors several times to confirm the cable is not getting caught or rubbing anywhere.*

## Français

1 Fixez le câble de la caméra en vous reportant au schéma 9.
Fixez le protège-câbles ⑧ sur son ruban adhésif ⑨, puis fixez et tendez le câble sortant du protège-câbles ⑧ à l'aide de l'attache-fils ⑩.

- *Assurez-vous que le câble n'est pas coincé dans la malle, dans les portes arrières ou dans une charnière.*
- *Le câble doit être hors des protections des charnières et des harnais.*
- *Une fois le câblage terminé, ouvrez et refermez plusieurs fois la malle arrière et les portes arrières afin de vous assurez que le câble n'est pas coincé et qu'il ne subit aucun frottement.*

## Español

1 Fije el cable de la cámara siguiendo el diagrama de la figura 9.
Coloque el dispositivo protector resistente al agua ⑧ con la hoja adhesiva correspondiente ⑨ y fije cualquier cable que sobresalga alrededor del dispositivo resistente al agua ⑧ con ayuda del fijador de cables ⑩.

- *Verifique que el cable no queda atrapado en el maletero, las puertas traseras o en cualquier bisagra.*
- *El cable debe estar fuera de las protecciones de las bisagras y arneses del vehículo.*
- *Una vez finalizado el cableado, abra y cierre el maletero y las puertas traseras varias veces para comprobar que el cable no queda atrapado ni plegado en ningún sitio.*

**Special Instructions for Pickup Truck Installations/**
**Instructions spéciales pour installation sur un pickup/**
**Instrucciones especiales para las instalaciones en camionetas**

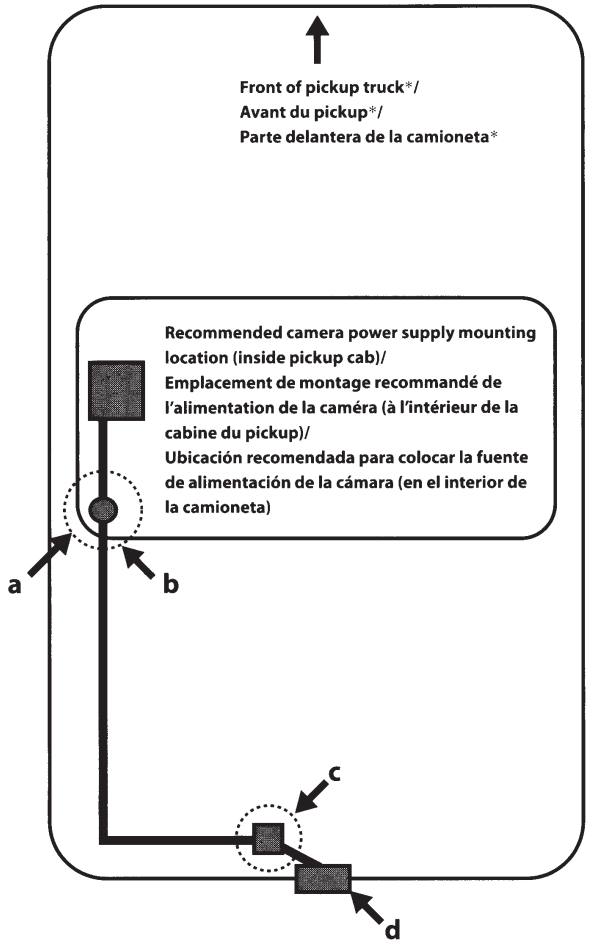

Front of pickup truck*/
Avant du pickup*/
Parte delantera de la camioneta*
Recommended camera power supply mounting location (inside pickup cab)/
Emplacement de montage recommandé de l'alimentation de la caméra (à l'intérieur de la cabine du pickup)/
Ubicación recomendada para colocar la fuente de alimentación de la cámara (en el interior de la camioneta)
a
b
c
d

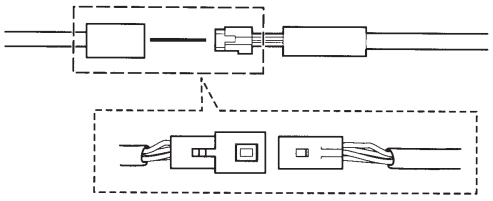
Fig.10/Schéma 10/Fig.10

* *Any type of vehicle, including pickup trucks, where the connector is installed outside of the cabin./*
* *Tout type de véhicule, notamment des camionnettes, où le connecteur est installé hors de la cabine./*
* *Cualquier tipo de vehículo, incluidas las camionetas, donde el conector se debe instalar fuera de la cabina.*

a: Rubber grommet to pass camera wire from inside of pickup truck cab to underside of pickup truck chassis.

b: In pickup truck* installations, the wire that connects between the camera and the camera power supply typically gets installed under the pickup truck chassis.
- This wire **must be protected** from damage using split-loom tubing in any areas where it is installed under the pickup chassis.
- The rubber grommet where the wire passes from the cab to the underside of the truck **must be sealed** with silicone to prevent moisture intrusion into the pickup truck cab.1

c: Connect the water-proof connector for the camera and camera extension cable securely. When disconnecting the water-proof connector, use a flat-blade screwdriver.



* *Water-proof connector*

d: Recommended HCE-C155 rearview camera mounting location (on rear bumper).

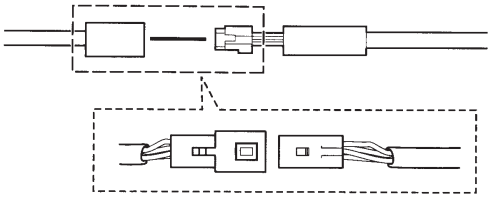
**⚠ Caution**
**This symbol means important instructions. Failure to heed them can result in injury or material property damages.**



a: Passe-cloison en caoutchouc pour faire transiter le fil de la caméra de l'intérieur de la cabine du pickup vers le dessous du châssis.

b: En cas d'installation sur un pickup*, le fil qui relie la caméra à son alimentation est généralement installé sous le châssis du véhicule.
- Le fil **doit être protégé** contre les dégâts au moyen d'un tubage pour câblage, là où il est installé sous le châssis du pickup.
- Le passe -cloison en caoutchouc, utilisé pour acheminer le fil de la cabine vers le dessous du pickup, **doit être protégé** avec du silicone pour éviter toute intrusion d'humidité dans la cabine du véhicule.

c: Raccordez correctement le connecteur étanche pour caméra et le câble d'extension pour caméra. Utilisez un tournevis à lame plate pour déconnecter le connecteur étanche.



* *Connecteur étanche*

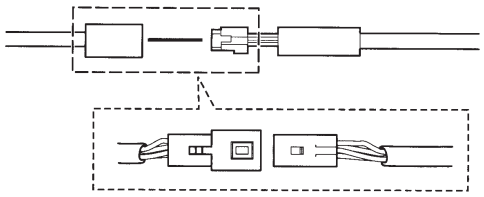
d: Emplacement de montage recommandé de la caméra de recul HCE-C155 (sur le parechocs arrière).

**⚠ Attention**
**Ce symbole désigne des instructions importantes. Le non-respect de ces instructions peut entraîner des blessures ou des dommages matériels.**

a: Arandela de goma para pasar el cable de la cámara desde el interior de la cabina de la camioneta a la parte inferior del chasis de la camioneta.

b: En instalaciones realizadas en camionetas*, el cable que conecta la cámara y la fuente de alimentación de la cámara normalmente se instala bajo el chasis de la camioneta.
- Este cable **debe estar protegido** mediante un tubo de hendidura en espiral en las zonas en las que se encuentre instalado bajo el chasis de la camioneta.
- La arandela de goma por el que pasa el cable desde la cabina hasta la parte inferior de la camioneta **se debe sellar** con silicona para evitar la entrada de humedad en la cabina de la camioneta.

c: Conecte el conector impermeable para la cámara y el cable de extensión de la cámara firmemente. Para desconectar el conector resistente al agua, utilice un destornillador plano.



* *Conector resistente al agua*

d: Ubicación recomendada para colocar la cámara de visión trasera HCE-C155 (en el parachoques trasero).

**⚠ Precaución**

**Este simbolo indica que las instrucciones son importantes. De no tenerse encuenta, podría ocasionarse heridas graves o daños materiales.**

## Specifications/Spécifications/Especificaciones

### English

- **Power Requirements** ..... 14.4V DC
- **Ground Type** ..... Negative ground type
- **Power Consumption** ..... less than 2.5W
- **Output Image** ..... Mirror image, VBS (NTSC Color signal system)
- **Output Drive Capacity** ..... 75 ohms
- **Image Sensor** ..... 1/4 type color CMOS image sensor, aspect ratio 4 : 3
- **Effective Number of Pixels** ..... 640 (horizontal) x 480 (vertical) approximately 300,000 pixels
- **Lens Section** ..... Focal length: f=0.82mm, brightness: F=2.6
- **Angle of field** ..... Horizontal: 190˚, Vertical: 150˚
- **Automatic Image Adjusting Function** ..... Automatic exposure adjustment, Automatic white balance adjustment
- **Synchro-System** ..... Internal synchronization
- **S/N ratio** ..... 40dB or more
- **Resolution (horizontal,center area)** ..... 300 TV lines
- **Illumination Range** ..... 1.5 lx or more (50 IRE)
- **Operating Temperature Range**
  - **Camera section** ..... –30˚C to +70˚C
  - **Power section** ..... –30˚C to +60˚C
- **External Dimensions (W x H x D)**
  - **Camera section (except projection on the rear)** ..... 15/16" x 15/16" x 1-1/16" (23.4mm x 23.4mm x 25.9mm)
  - **Power section (except projection)** ..... 4" x 2" x 1" (100mm x 50mm x 25mm)
- **Weight**
  - **Camera section (including cable)** ..... 1 oz. (32g)
  - **Power section (including cable)** ..... 6 oz. (182g)

### Français

- **Puissance requise** ..... 14,4 V DC
- **Type de masse** ..... Masse négative
- **Consommation d'énergie** ..... moins de 2,5 W
- **Image reproduite** ..... Image miroir, VBS (système de signaux couleur NTSC)
- **Capacité d'excitation de sortie** ..... 75 ohms
- **CCD** ..... Capteur d'image CMOS couleur 1/4", format d'image 4 : 3
- **Nombre effectif de pixels** ..... 640 (horizontal) x 480 (vertical), environ 300.000 pixels
- **Section de l'objectif** ..... Focale: f = 0,82 mm, luminosité: F = 2,6
- **Angle de champ** ..... Horizontal : 190°, Vertical :150°
- **Fonction de réglage automatique de l'image** ..... Côntrole automatique de l'exposition, réglage automatique de la balance des blancs
- **Système de synchronisation** ..... Synchronisation interne
- **Rapport signal sur bruit** ..... 40dB et plus
- **Résolution (horizontale,zone centrale)** ..... 300 lines de Télévision
- **Plage d'illumination** ..... 1,5 lx et plus
- **Plage de températures de fonctionnement**
  - **Section de la caméra** ..... –30 à +70 °C
  - **Section d'alimentation** ..... –30 à +60 °C
- **Dimensions externes (l x H x P)**
  - **Section de la caméra** ..... 15/16" x 15/16" x 1-1/16" (23,4mm x 23,4mm x 25,9mm) (partie saillante arrière non comprise)
  - **Section d'alimentation** ..... 4" x 2" x 1" (100mm x 50mm x 25mm) (partie saillante non comprise)
- **Poids**
  - **Section de la caméra (câble compris)** ..... 1 oz. (32g)
  - **Section d'alimentation (câble compris)** ..... 6 oz. (182g)

| | |
|---|---|
| Requisitos de alimentación | 14,4 V CC |
| Tipo de toma de tierra | Tipo toma de tierra negativa |
| Consumo de energía | menos de 2,5 W |
| Imagen de salida | Imagen en espejo, VBS (sistema de señal a color NTSC) |
| Capacidad de impulso de salida | 75 ohmios |
| Sensor de imagen | Sensor de imagen CMOS de 1/4 pulg., relación de aspecto 4 : 3 |
| Número efectivo de píxeles… | 640 (horizontal) x 480 (vertical), aproximadamente 300.000 píxeles |
| Sección de la lente | Longitud focal: f = 0,82 mm, brillo: F = 2,6 |
| Ángulo de campo | Horizontal: 190°, Vertical: 150° |
| Función de ajuste de imagen automático | Ajuste automático de exposición; Ajuste automático de balance de blancos |
| Sistema de sincronización | Sincronización interna |
| Relación señal-ruido | 40dB o más |
| Resolución (horizontal, área central) | 300 líneas de televisor |
| Alcance de la iluminación | de 1,5 a 100.000 lx |
| Intervalo de temperatura de funcionamiento | |
| • Sección de cámara | –Entre 30 y +70°C |
| • Sección de alimentación | –Entre 30 y +60°C |
| Dimensiones externas (ancho x alto x largo) | |
| • Sección de cámara (excepto proyección trasera) | 15/16" x 15/16" x 1-1/16" (23,4mm x 23,4mm x 25,9mm) |
| • Sección de alimentación (excepto proyección) | 4" x 2" x 1" (100mm x 50mm x 25mm) |
| Peso | |
| • Sección de cámara (incluido cable) | 1 oz. (32g) |
| • Sección de alimentación (incluido cable) | 6 oz. (182g) |

Thank you for choosing Alpine for your car audio equipment needs. Our goal is to produce the best audio/video/navigation products in the world and hope your expectations are met.

Please take a moment to protect your purchase by registering your product now at the following address: www.alpine-usa.com/registration. You will be informed of product and software updates (if applicable), special promotions, and news about Alpine. Also, by registering your product, you will automatically be entered for a chance to win various prizes such as gift cards, Alpine products, and/or a complete system.

We look forward to continue serving you in the future.

Sincerely,

The Alpine Team

## French

Nous vous remercions d'avoir porté votre choix sur un équipement audio automobile Alpine. Notre principal objectif est de fabriquer les meilleurs produits audio, vidéo et de navigation au monde afin de répondre aux exigences de nos clients.

Veuillez prendre quelques instants pour sécuriser votre achat en enregistrant votre produit à l'adresse suivante : www.alpine-usa.com/registration. Vous serez tenu informé des nouveaux produits, des mises à jour logicielles (le cas échéant), des promotions spéciales et des informations concernant Alpine. L'enregistrement de votre produit vous donne par ailleurs la possibilité de gagner des dizaines de cadeaux, tels que chèques-cadeaux et articles Alpine, ainsi qu'un système complet.

Nous espérons que nos produits vous donneront entièrement satisfaction.

Cordialement,

L'équipe Alpine

## Spanish

Gracias por elegir Alpine para las necesidades de equipamiento de audio de su vehículo. Nuestro objetivo es fabricar los mejores productos de audio/vídeo/navegación del mundo y esperamos poder cumplir sus expectativas.

Dedique unos momentos a proteger su compra: registre ahora su producto en la siguiente dirección: www.alpine-usa.com/registration. Recibirá información de novedades sobre el producto y actualizaciones de software (si se producen), promociones especiales y noticias de última hora de Alpine. Asimismo, si registra su producto, entrará automáticamente en el sorteo de diversos premios, como tarjetas de regalo, productos de Alpine y/o un sistema completo.

Esperamos poder seguir ofreciéndole el mejor servicio en el futuro.

Atentamente,

El equipo de Alpine

PART NO. 68-21627Z36-A
M3544153010

# LIMITED WARRANTY

ALPINE ELECTRONICS OF AMERICA, INC. AND ALPINE OF CANADA INC. ("Alpine"), are dedicated to quality craftsmanship and are pleased to offer this Warranty. We suggest that you read it thoroughly. Should you have any questions, please contact your Dealer or contact Alpine at one of the telephone numbers listed below.

## ● PRODUCTS COVERED:

This Warranty covers Car Audio Products and Related Accessories ("the product"). Products purchased in the Canada are covered only in the Canada. Products purchased in the U.S.A. are covered only in the U.S.A.

## ● LENGTH OF WARRANTY:

This Warranty is in effect for one year from the date of the first consumer purchase.

## ● WHO IS COVERED:

This Warranty only covers the original purchaser of the product, who must reside in the United States, Puerto Rico or Canada.

## ● WHAT IS COVERED:

This Warranty covers defects in materials or workmanship (parts and labor) in the product.

## ● WHAT IS NOT COVERED:

This Warranty does not cover the following:

① Damage occurring during shipment of the product to Alpine for repair (claims must be presented to the carrier).
② Damage caused by accident or abuse, including burned voice coils caused by over-driving the speaker (amplifier level is turned up and driven into distortion or clipping). Speaker mechanical failure (e.g. punctures, tears or rips). Cracked or damaged LCD panels. Dropped or damaged hard drives.
③ Damage caused by negligence, misuse, improper operation or failure to follow instructions contained in the Owner's manual.
④ Damage caused by act of God, including without limitation, earthquake, fire, flood, storms or other acts of nature.
Any cost or expense related to the removal or reinstallation of the product.
⑤ Service performed by an unauthorized person, company or association.
⑥ Any product which has the serial number defaced, altered or removed.
⑦ Any product which has been adjusted, altered or modified without Alpine's consent.
⑧ Any product not distributed by Alpine within the United States, Puerto Rico or Canada.
⑨ Any product not purchased from an Authorized Alpine Dealer.

## ● HOW TO OBTAIN WARRANTY SERVICE:

① You are responsible for delivery of the product to an Authorized Alpine Service Center or Alpine for repair and for payment of any initial shipping charges. Alpine will, at its option, repair or replace the product with a new or reconditioned product without charge. If the repairs are covered by the warranty, and if the product was shipped to an Authorized Alpine Service Center or Alpine, Alpine will pay the return shipping charges.
② You should provide a detailed description of the problem(s) for which service is required.
③ You must supply proof of your purchase of the product.
④ You must package the product securely to avoid damage during shipment. To prevent lost packages it is recommended to use a carrier that provides a tracking service.

## ● HOW WE LIMIT IMPLIED WARRANTIES:

ANY IMPLIED WARRANTIES INCLUDING FITNESS FOR USE AND MERCHANTABILITY ARE LIMITED IN DURATION TO THE PERIOD OF THE EXPRESS WARRANTY SET FORTH ABOVE AND NO PERSON IS AUTHORIZED TO ASSUME FOR ALPINE ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THE PRODUCT.

## ● HOW WE EXCLUDE CERTAIN DAMAGES:

ALPINE EXPRESSLY DISCLAIMS LIABILITY FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES CAUSED BY THE PRODUCT. THE TERM "INCIDENTAL DAMAGES" REFERS TO EXPENSES OF TRANSPORTING THE PRODUCT TO THE ALPINE SERVICE CENTER, LOSS OF THE ORIGINAL PURCHASER'S TIME, LOSS OF THE USE OF THE PRODUCT, BUS FARES, CAR RENTALS OR OTHERS COSTS RELATING TO THE CARE AND CUSTODY OF THE PRODUCT. THE TERM "CONSEQUENTIAL DAMAGES" REFERS TO THE COST OF REPAIRING OR REPLACING OTHER PROPERTY WHICH IS DAMAGED WHEN THIS PRODUCT DOES NOT WORK PROPERLY. THE REMEDIES PROVIDED UNDER THIS WARRANTY ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS.

## ● HOW STATE/PROVINCIAL LAW RELATES TO THE WARRANTY:

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state and province to province. In addition, some states/provinces do not allow limitations on how long an implied warranty lasts, and some do not allow the exclusion or limitation of incidental or consequential damages. Accordingly, limitations as to these matters contained herein may not apply to you.

## ● IN CANADA ONLY:

This Warranty is not valid unless your Alpine car audio product has been installed in your vehicle by an Authorized Installation Center, and this warranty stamped upon installation by the installation center.

## ● HOW TO CONTACT CUSTOMER SERVICE:

Should the product require service, please call the following number for your nearest Authorized Alpine Service Center.

| | |
|---|---|
| **CAR AUDIO** | **1-800-ALPINE-1 (1-800-257-4631)** |
| **NAVIGATION** | **1-888-NAV-HELP (1-888-628-4357)** |

Or visit our website at; http://www.alpine-usa.com

**ALPINE ELECTRONICS OF AMERICA, INC.,** 19145 Gramercy Place, Torrance, California 90501, U.S.A.
**ALPINE ELECTRONICS OF CANADA, INC.,** 777 Supertest Road, Toronto, Ontario M3J 2M9, Canada
Do not send products to these addresses.
Call the toll free telephone number or visit the website to locate a service center.